

President

Roy Pallett 0438 392 041 Business Secretary Anna McGrane 0419 347 743 Minutes Secretary Noel Manning 6344 2277 www.apstasnorth.org Email: <u>apstasnorth@gmail.com</u> Post: 45 Osborne Avenue, Trevallyn. Tas. 7250

Northern Group Newsletter January - March 2023

The first months of a year are usually a quieter period, but not so this year. January began with the delayed 2022 Gettogether which was moved from the previous November to correspond with the best flowering time for the Ben Lomond flora. Close to 50 members from the South, North West and North Groups enjoyed this special event which Roy Skabo so successfully organised. Then there have been several excursions - some combined with the Launceston Field Naturalists, to view a diversity of plants prolific after the 2022 rains. As well a few members volunteered to help in seed collecting expeditions and/or participate in the Cambridge St. Reserve working bees and of course there are always members who gather for propagation and garden working bees which continue all year long.

January 13 - 15 **State Get-together** Ben Lomond

A special way to start the year!





Members began arriving from midday at the northern plateau on top of a mountain gloriously coloured at first glimpse with *Richea scoparia*. With a little more discernment *Bellendena montana* was detected - a creamy, in places, profuse addition to the magnificent plateau garden stretching out before us.

Those members obedient or more likely, simply organised, were well prepared with plant lists, or even better, downloaded lists ready to consult when in the field. The comprehensive work done by Roy Skabo and Andrew Smith when compiling this ever

so handy resource was superb - another one of those times when technology made sense! Pre-reading material was helpful.

https://www.qvmag.tas.gov.au/files/assets/qvmag/library/publications/occasional/plant-comm-of-ben-lomond_1.pdf

John Davies generously joined us on the plateau and members benefitted from his expertise, almost making it seem easy as he was able to recognise so much of the vegetation. His knowledge of soils with Keith Corbett's geological knowledge enabled members to deepen their understanding of the area.

There were four organised walks: The longer, little more challenging began down the road from Carr Villa up to the ski village on top. It was about 5 kms, steep at the beginning and about three hours duration.

Ian Blaydon shared his experience of this walk:

The Carr Villa walk took place on Saturday morning. There were 15 participants led by John Tabor and ably supported by Louise Skabo. The walk started from the Carr Villa carpark at an altitude of 1225m and climbs to a maximum altitude of 1525m over a distance of 5km. Classified as a Grade 3 walk, most of the climbing occurs over the first 3km before the topography largely flattens out in an area referred to, somewhat euphemistically as the Plains of Heaven.



It was a bright sunny day to start with but low clouds came in quickly so the latter part of the walk at the higher altitudes was in misty and windy conditions.

The base of the walk is below the tree line but this is left behind by about 1300m as the vegetation changes to be dominated by *Richea scoparia* and *Bellendena montana* with *Cyathodes straminea* (spreading cheeseberry) as well as *Tasmannia lanceolata* well developed in the lower section.





< R. scoparia

^ C. straminea



There are barren boulder fields interspersed with the vegetation which are extensions of the rockier hillsides above.

Higher up the vegetation gives way to grasses and lower growing plants such as *Viola betonicifolia* with splashes of white from *Euphrasia collina* and very occasional early *Gentianella diemensis* struggling to bloom.



Vivid green Abrotanella forsteroides and Pterygopappus lawrencei begin to dominate the upper slopes with one individual plant observed which was at least 2m across.

Bare glaciated pavements began to dominate the landscape towards the top, many showing the clear pattern of columnar jointing with individual columns 1.5m to over 2m across.



Hamilton's Crag was also a half day walk, perhaps with the constant stops more of an amble, to the east from the ski village across the plateau to the dolerite ridge. The aim was to climb to the area where members would see the cushion plant *Veronica ciliolata* and then continue to the top, hopefully to see the vista and the 'topples' - a geological feature Keith had urged us to see in his Friday pre-dinner warm up geological talk.

Members setting out surrounded by the expanse of *Richea scoparia*. The promising morning sunshine had disappeared but the myriad of colours was not dimmed for the 15 who enjoyed this morning's walk to the hills in the distance.



A great introduction to the beauty and variability of this rugged landscape.



The first stop was beside the road where John Davies pointed to *Abrotonella forsteroides* - a close-up showing the bright green cushion plant in flower.



The magnification on the phone camera was able to depict this plant clearly, even to show the fine hair at the tip of each flower.

Next to this was a small prostrate *Ranunculus collinus*(?). >





Orites revolutus with boat shaped fruit follicles was widespread on the plateau along with Orites acicularis, distinguished from O. revolutus by its yellow green colour.

Craspedia glabrata not so attractive when first spotted but under the camera lens so much of intrigue with dainty yellow centres forming an attractive lacy pattern.











Above left: *Lycopodium fastigiatum* (?). This is a primitive fern ally group which used to be trees in the Carboniferous times and now is represented by these small plants. (Source: John Davies)

Ewartia catipes is a prostrate perennial herb forming attractive silvery mats. The flower is a white paper daisy with a reddish centre.

Above right: *Ewartia sp. nov.* – this is an undescribed *Ewartia* species that has just come to light this summer. (Source: James Wood)

< Veronica ciliolata, Ben Lomond cushion plant. This is a rare plant known only in this one spot in Tasmania. It was nearing the end of its flowering period but it was still good to see and admire yet another small wonder.



< Beautifying the road edge, *Montia australasica*, white purslane - a member of the Portulacaceae family.

The Legges Tor afternoon walk began with good light; an easy board walk; an interesting, diverse collection of plants which crowded the track.

Swathes of richeas dominated, stretching in all directions: *R sprengelioides, R. scoparia* and *R. acerosa,* its creamy flowers particularly attractive.

So much to note: Orites, Olearia rodwayi, O. obcordata, Epacris serpyllifolia, Ewartia species, Gentian diemensis, Wahlenbergia saxicola adding a touch of blue, the vivid green of the ground hugging cushion plants with the bejewelled Drosera arcturi.





^ Ozothamnus rodwayi

Close-up: O. rodwayi var. kingii >





As we climbed a little higher it was clear that the heavy mist would ensure no view at the summit and the track was closing in, but there was enough of interest on the ground the first in-flower *Gentian diemensis* waiting patiently for photographers. >

< The Ben Lomond snow gentian is distinguished by the attractive violet markings on its leaves.





^ Drosera on A. forsteroides





^ More Ewartia sp. nov.

 Tiny dripping drosera plants, glisten under the camera lens.

The heavy mist was closing in so it was back to the village to prepare for another of chef Charlotte's tasty meals and the chance to share the day's experiences.

The Little Hell Circuit: 14 members walked this. For details read Louise Skabo's account in the March Eucryphia.



The following photos were taken on Friday afternoon not far from the accommodation. The wide angle view showed swathes of shrubby colour but what follows are the joys to be found with a close up view of this superb alpine garden which greeted us with so many treats.





















Daisies, berries, senecios, droseras and even the occasional wallaby - so much to appreciate.



Bellendena montana

Bellendena montana

Acromanthus montanus





< Before we leave Ben Lomond there needs to be a vast thank you to one particular person: Roy Skabo who was the organiser and chief mover of this State Get-together. Roy was diligent and thorough in his efforts and as a consequence of the hours devoted to the planning, the get-together flowed smoothly. The catering was efficient and the food generous (the ice cream to die for!), the information and plant lists particularly the online lists and photos, John Davies expertise, Keith Corbett's mountain talk, the well planned and informed walks - were all organised so that the weekend was one to remember.

Thank you also to Andrew Smith who was responsible for the data base of the wonderful photographs gathered during reconnaissance trips which he, Roy and sometimes, Louise, made as part of the preparation.

Thanks also to Louise Skabo for her work. In particular she ensured that the dining room was attractive and that all things such as rosters, tables, flowers (many from Rosemary V's garden) were organised for members needs.

Photo: L. Skabo

The highlight for January may have been the Ben Lomond Get-together, however, the usual nursery and Heritage Forest garden tasks were maintained by those able to slip away from holiday activities, spend a couple of hours catching up and working together before enjoying a chat over cake and coffee/tea.

Propagation, January 7

There was much to do e.g. the pricking out and potting up of seedlings from seeds sown in October and cared for by Sharon Percy in her small hot-house. There were many trays of plants moved from the shade house to the outside racks where they were organised alphabetically - a time consuming task. However, the outside racks are now looking good for a healthy Autumn sale. The propagation of cuttings also filled in some of the shade house gaps, continuing the nursery cycle that helps disseminate more native plants into suburban gardens.

TNGarden Working Bee, January 24

It was a pleasant morning with the usual weeding, pruning and mulching tasks being attended to. The regular effort from members keeps the garden looking good but there is always more to be done to free beds of the weeds such as the twitch and hawthorns which seem to shoot up to wait for members' attention each month.

Sunday, 29 January

Excursion to Lake Mackenzie, Central Plateau Conservation Area

Lake Mackenzie is in the Central Highlands south west of Mole Creek. The lake 1100 above sea level is formed by a dam and is part of Tasmania's hydro electric scheme. Water from Lake Mackenzie flows via canals, tunnels and pipes to the Fisher Power Station. The water drops 650 metres to Fisher Power Station then runs into Lake Parangana. The area was badly affected by the 2016 bushfires.

The forecast was that the heavy rain clouds would clear, and they did as a small group left Mole Creek and began the climb up to the plateau through wet sclerophyll forest where a quick stop was made to admire *Prostanthera lasianthos*.



< In places the roadside was lined with a floriferous golden *Senecio linearifolius*.

There were numerous small plants in flower such as *Leptorhynchos*, *Craspedia*, *Brachyscome* species.

Scaevola hookeri > first noted at the first stop on the plateau.





Shrubby, struggling bushes e. g. *Leptospermum rupestre*, were greening the area but it will be a long time before the grey twisted burnt branches will

be fully replaced with greenery.

< Nevertheless, it was pleasing to see the diversity of the flora when walking through what at first seemed to be sparsely vegetated spots.

The next interesting stop was beside the Fisher canal where at first, eyes were drawn to the *Diplarrena sp.* which was striking a pose for the camera.





It didn't take long to realise this particular spot was crowded with intriguing cushion plants, delicate gentians even a special orchid, *Prasophyllum mimulum*.

< Close-up of a cushion plant, *Abrotanella forsteroides*, with *Plantago gunnii* in flower.

Interestingly the cushion plants were the quickest to recover from the 2016 fires. In the photo below right, the edges of these plants have been burnt leaving a more mounded shape which drew Janet's interest.



<

< The photo is rich in species:-A. forsteroides, Leptorhynchos squamatus (right corner), a species of Gentianella. Nature's garden excels!





Prasophyllum mimulum, highland leek orchid, endemic to Tasmania proof of Jeff's keen eyes and orchid knowledge.

Closer to Lake Mackenzie Xerochrysum bracteatum (right) was catching the sunlight. Scaevola hookeri was also widespread and Ozothamnus hookeri was putting on a show.





Ozothamnus hookeri >

< Easily missed but attractive, Gonocarpus montanus, mountain raspwort.



Wednesday, February 1 and 26

Seed Bank Collection, Conara

The Tasmanian Seed Conservation Centre (TSCC) asked if NG members might like to help collect seed for the seed bank from a threatened species, *Tricoryne elatior*. This is a lily-like plant resembling small *Bulbine* or large *Hypoxis* plants. So a few members volunteered to check out the site, marking, and in some cases, covering the small flowers for later seed collection.



On Sunday 26th, members with James Wood and Evan Smith (RTBG) returned to 'Baynton Forest' near Conara to seek out the tiny seeds - not an easy task because some of the marked plants had been browsed and soon members realised that the best places to find the small delicate stems with the tiny seed pods were in amongst the poa and lomandras!

Fortunately the seed from the bagged flowers produced some seeds and keen-eyed members a few more.



Thursday, February 16

Seed Bank Collection, Mt Puzzler Forest Reserve

Seven members joined James and Laura from the RTBG. The weather was pleasant; the area fresh, unknown to our members. There were many plants to note but not to stop at because eyes were trained on the dried heads of seeds on the target plants. However lunch afforded an opportunity to indulge in the surrounding flora in an area worthy of a future excursion.





It was a productive morning as the seed bags began to swell with seeds from *Stackhousia monogyna* - the goal of this seed collection day.

Blue was a strong colour near the spot where members had a lunch break. In fact, the Mt Puzzler Forest Reserve (near Fingal) at an elevation of approximately 800m above sea level was a place to delight as the pictured *Wahlenbergia*, *Lobelia*, *Brachyscome* species show. There was also *Lomatia tinctoria* with a native visitor. Orchids such as the green *Pterostylis decurva* (below left) and the pink *Eriochilus cucullatus*, parson's bands, proudly faced the camera.











Coronidium scorpioides bright yellow tops also drew attention. In places their seed was collected along with *Senecio prenanthoides* and *Ozothamnus erubescens*. (After cleaning, 80,000 *Ozothamnus* seeds were counted.)





Tuesday, 21 February

AGM and General Business Meeting



At the AGM Roy Pallett welcomed 31 members. The president's report celebrated the past year as noted in the quarterly reports to Eucryphia and as described in the newsletter; the increasing awareness of our NG, not just in the community but in CoL; joining Landcare; the updated website - a boost to the APST image; the popular excursions; that visit by Friends of Botanical Gardens; plus the establishment of the Reserves Conservation Committee such a significant and worthy development. The development of native plant displays at the Launceston Horticultural Show, plus another Blooming Tas. display of plants and APST Inc. groups' work, were also noted for their success in fostering community awareness of native plants.

Appointees' reports were commended and the appointees thanked for another successful year. The need for a publicity appointee was signalled for discussion in the following business meeting. Mentioned also: the nursery and the native garden at Heritage Forest, just two activities that would benefit from assistance with their management tasks with more members needed to share the load.

Finally the election of office bearers saw little change in positions with Ian Thomas becoming a councillor, replacing Roy Pallett who now becomes the proxy councillor.

The president's report celebrated the past year and looked forward to 2023 with for example a focus on the involvement of even more members in all areas of the NG.

The General Business Meeting

Correspondence and Treasurer's report were accepted and attention moved to items such as the checking out of a new venue. Anna M. and Andrew S. volunteered to report to the next meetings with details of 3 venues. In regard to discussion on the simplicity of the NG calendar compared to the new state website, Margaret. K provided information

about the need to completely update the calendars if we wanted to change them. Margaret would add our stand-alone calendar for NG's activities/events. Louise S., Margaret K. and later, Kirsten S., agreed to look at the role of a publicity officer. Other notices included the need for more volunteers for supper and Plant of the Month presentations. Louise suggested that the POM person could be responsible for the plant table. Janet mentioned a request for adding *Pentachondra involucrata* to the seed orchard which Janet said needed the members' decision. Rosemary V. talked about varying our displays at the April, September and November Horticutural show. Louise was commended for her article in *Fagus* the RTBG quarterly magazine and members were encouraged to read this excellent article. Roy S. was congratulated on another wonderful programme.

Janet H. spoke about the need for members to share the nursery organisation work load, that succession planning was important. Her suggestion was for three roles e.g. one to manage propagation, another to manage plant sale days, and preferably a third member for infrastructure. The State Strategic Planning group sought a third person to fill a position on this important committee. Anyone interested to please let Margaret K Killen know. Janet Hallam and Judith Blaydon are the other representatives from the Northern Group.

Thursday, 23 February

Excursion to Notley Fern Gorge

A small group of members explored this beautiful circuit walk through overarching fern glades growing under a canopy of massive *Eucalyptus viminalis*, *E. obliqua* and *Acacia melanoxylon*.







We started searching for Gunn's tree orchid, *Sarcochilus australis*, which has been found here many times but, they were very hard to spot either because it was not flowering season or the orchids have greatly diminished in number. We pondered whether this was due to climate variation or even to theft but decided it was probably because of the extensive forest clearing all around this little moist gully. This opens the small valley up to more heat and wind which tree orchids dislike. We espied only one or two small leaves and roots on their favourite plant, *Coprosma quadrifida* trees.





In contrast, the many

Tasmanian ferns were flourishing including several Blechnums (nudum, minus and wattsii) and Aspleniums (bulbiferum, flabellifolium and appendiculatum).

The Rumohra adiantiformis, leathery shield fern (above right) had interesting, large shiny black sori on the underside of its fronds.

Sori on *Microsorum pustulatum.* >



^ One never tires of admiring the giant *Dicksonia* antarctica whose trunks are dripping with several species of filmy ferns, *Hymenophyllum* (australe, cupressiforme and flabellatum).



Dicksonias also host Tmesipteris obliqua the common fork fern (far left), Microsorum pustulatum, the kangaroo fern and the little finger ferns, Notagrammitis billardierei (centre left).

The creek was fairly dry after summer but running enough for us to enjoy its fern, lichen and mossy rock-lined meanderings as we crossed the two little bridges.

We lingered over lunch in a sunny opening above the car park, enjoying discussions and amusing tales so much we decided to leave the afternoon excursion to Holwell Gorge for another day. Two Ians in the ferny glade!





 Microsorum pustulatum, kangaroo fern



< *Coprosma quadrifida* resembling a Xmas tree, covered in vivid red fruit.

C. quadfirida is a slender, erect, medium sized shrub which has male and female flowers on separate bushes.

It is widespread in damp, moist gullies, not widely grown and requires pruning to maintain density.

It can be propagated from both seed and cuttings. Source: *Tasmania's Natural Flora*

Thanks to L. Skabo and I. Blaydon for the many photos from this excursion.



Shield fern

Shiny filmy fern

Hard water-fern

Tuesday February 28 Tasmanian Native Garden Working Bee

Another busy day tackling weeds, mulching and a little pruning, especially to reclaim pathways from e.g. *Allocasuarina crassis* and the rapidly growing *Solanum laciniatum*, kangaroo apple.



Daphne and Suzanne with Leon Lange. Leon who delivered the bases for the plant labels was demonstrating how to best place them firmly into the ground.

> Ozothamnus sp. looking healthy after overnight rain. >



^ Roy P. trimming Allocasuarina crassis



Rosemary's Garden News

A big thank you to all the members and friends who came to my open garden on the 29th December. It was lovely to see so many of you and I enjoyed sharing the garden. I hope to have another open day in early spring.

It has been a quiet time in the garden for the past few weeks. This summer has been dry, but, not quite as hot as a 'normal' summer. I have found another new plant in the grassed area. Most of us are familiar with the weed *Epilobolium ciliatum*. Just below the rectangle area marked out with the four 'Grecian' poles I noticed something different coming up in the cut grass section, which has not been cut as frequently because it has become dry.



< A couple days later it was in flower and so the ID process began. It is *Epilobium billardiereanum*. Its common name is robust willow herb.

Apparently it is widespread throughout the State. I have never noticed it before in the garden. It just goes to show what can show up when one stops mowing.

The week before I found a single daisy flower in the middle of the rectangle area itself. It looked different to the other daisies close by and on a closer inspection it was. I have ID it as *Leptorhynchos squamatus*. I remember seeing it growing amongst kangaroo grass when I attended a field day in the Northern Midlands a number of years ago. I hope it spreads itself like it had in that paddock.



We have noticed we now have the Klug's Xenica butterfly every summer in the grass garden.

It certainly has not been a quiet summer fauna wise. I have lost a chook to a spotted quoll, so now I am down to just 3 chooks.

Southern Brown bandicoots have been busy in the garden. Alf found a nest behind the pond in the grass under the melaleucas when he was cutting some of the long grass a couple of weeks ago. One sees them around dusk most nights or very early in the morning.





^ It is hard to keep track of the number of different beetles one sees throughout the garden.

The birds have been busy in the bird baths throughout the garden. They certainly appreciate water being available.



< The Yellow- tailed cockatoos made a meal of my *Hakea petiolaris*. They were very persistent over a couple days. I had to 'shoo' them off in the end otherwise I do not think I would have had a hakea bush left at all.

With birds, butterflies, beetles, bandicoots plus echidnas and lizards to name a few of the visitors to the garden it can be a busy place.







SUMMER faded to AUTUMN

The move from summer to autumn was unremarkable not so dry now but the soil was in need of some steady soaking rain and where it came, was welcomed. The overcast weather remained, the cooler days made garden chores easier - sunnier days made it a delight to be pruning, weeding.

2nd March: the first *Eucryphia* for 2023 appeared in members' mail boxes. It contained newsy articles, including an excellent write-up of the Ben Lomond based State Get-together.

6th March: another read in your inbox - details of the next ANPSA biennial conference, Gardens for Life, hosted by APS Victoria. It starts on 30th September 2024.

13th March: Email details also appeared in regard to the annual APST Get-together 2023 organised by the Hobart Group. Accommodation bookings are filling up.

22nd March: Hobart Group News appeared in mail boxes. Find the time to catch up on news from the south.

Saturday, 4 March Propagation, Windsor Park Nursery

The nursery was bustling with members by the 1 o'clock start. Sale plants needed attention, some repotting and fertilising. Janet noted that plants in the shade house had shown 'impressive growth' such that several trays were moved outside to the sale stock. Other tasks included tidying work in the shade-house e.g. removing failed cuttings, more potting on and the usual propagation of new cuttings. *Dodonea viscosa* or *D. sinuolata* plus *Olearia phlogapappa* were some called-for cuttings.





Downing of tools at 3 o'clock saw members enjoy drinks and delicious cakes including Fran's famed rhubarb cake.



Wednesday 15 March

Reserves Conservation Committee meeting

This committee meets on the second Wednesday each month. The March meeting discussed the possible future of Cambridge Street, its management structure and more on a 'Friends of the Cambridge Street Reserve' group.



This year members, alongside community volunteers, have participated in regular working bees at either one or two working bees on the first Thursday and Saturday of each month.

There has been good progress on the rehabilitation work which in the first phase has been to remove weeds and inappropriate plantings to protect and foster native plant growth.

< Making the message clear!



< This photo marks a recent activity:

On Tuesday 21st March, Magali Wright conducted a well attended workshop. There were representatives from e.g. CoL, Tamar NRM and others. The day was informative, busy and very much appreciated by attendees.

What a worthwhile start for the Reserves and Conservation Committee members' ambitions - a remarkable feat resulting from much effort, hard work and persistence from generous, motivated members actively promoting APST NG.

Tuesday 21 March

General Meeting

First up were a few brief reminders about the up-coming choice of venue for our meetings, a reminder to send notices of events to Karen to ensure they are online for everyone to access. Rosemary V. asked that we provide help at the Launceston Horticultural Show; decide upon the plants that we can contribute; and send names to Margaret Killen so labels can be printed for our table display.

Plant of the Month

Scaevola aemula

Kay Pallett

A member of the Goodeniaceae family, *Scaevola aemula*, fairy fan flower, is a quick-growing perennial herb. Plants may be either decumbent or ascending in growth, growing to a height of 30-50 cm and a width of 30-90 cm.

The genus is widespread throughout southern Australia with about 70 species, most (approx. 40) of which are in W.A.



Tasmania has three species:

S. aemula, S. hookeri, S. albida.



Goodeniaceae flowers interestingly have a cover or cup called an indusium, a structure which varies between genera. When mature it catches the pollen and upon dispersal of the pollen that flower then becomes fertile. Hence this process protects the plant against self-pollination. (Source: *Tasmania's Natural Flora*)

Scaevola aemula is common in gardens and an increasing number of 'selected' forms are being sold in nurseries e.g. pink mist, purple fanfare. The flowers have a distinctive five petal fan shape; form in clusters around the stem; and flower prolifically over spring and summer. It likes the sun, tolerates most soils and once established has flourished in my garden - one plant is over six years old.



Speaker: Magali Wright 'Orchid Conservation and Research Program'

While some of our members are very familiar with the identification and the growth idiosyncrasies of Tasmanian orchids, few of us had any indication of the complexities of their growth, development, reproduction and survival techniques.

Magali is involved in an orchid conservation and research program - the aim to Improve the conservation status of Tas. threatened orchids and to implement the national recovery plan.

The RTBG provides the facilities for this important work. See more details under 'Conservation' on the website.





In Tasmania there have been 213 species of orchids identified, many endemic. One third of these are threatened - in fact 37 percent of Tasmanian EPBCA (Environment Protection and Biodiversity Conservation Act) listed flora are orchids.

< Paraprasophyllum tunbridgense an endangered species through land clearing, grazing and because of its small population size.

Another is Paraprasophyllum taphanyx known from only 3 plants in remnant native grassland from one spot in Tasmania.



Magali reminded us of orchid life cycles, of the ways in which they sexually entice pollinators or use food deception but it is their need to be colonised by fungi that makes them tricky to propagate.

Micorrhyza fungi, symbiotic with all plants in the Orchidaceae family is an essential element in orchid conservation work so all the propagation being done by the group is with mycorrhizal fungi. Orchid seeds rely on fungal hyphae for nutrients in their early stages of growth and in some cases throughout their life - they need the fungi for germination, growth and survival. The complexity of the fungi is such that many orchid fungi have been known only from DNA sequencing. Now in recent years they have gradually been able to name the fungi and to see its separation into different species - being able to describe the fungi based on their morphology as well as their DNA. Next they are moving on to look at the fungi in, for example, sun orchids.

A major goal of the Conservation Program is to get orchid flora represented in the Tasmanian Seed Conservation Centre i.e. the seed bank, together with inhabitable micorrhyzal fungi for each species.

They collect not just seed but also the fungi. For this they need a permit and the landholder's permission. It is important not to collect too much seed from one group of plants so that collection is

> humidity at -20°C). The seed is like dust and so not easy to work with. It is stored in individual packets so some seed is

spread out. Magali said that by collecting from different spots 'over four years you might get genetics from over 20 - 30 plants for translocation. You wouldn't want to translocate plants that are only growing from a few individuals.'

Back in the lab the seed is processed and put into cold storage (15% relative



stored long term without disturbance while some is kept in separate freezers and can be taken out when needed for propagation etc.

Seed is also being collected from orchids growing at the RTBG nursery. Volunteers do this time consuming task. The varying ripeness of seeds for collection means several visits have to be made to the orchids. Volunteers lighten the load so does having people such as Mark Wapstra send in seed from plants from other parts of





Also in the lab, the fungi that is collected with the orchid seed has to undergo a process of isolation.

< This is a leek orchid root slice. The dark parts indicate the fungi. Under a microscope using a scalpel on a bit of the root, pelotons i.e. little fungal coils are teased out. These are rinsed with drops of sterile water and placed in the fungal isolated media. The hyphae grows from the little coils and this is what is used as a medium to adopt the seed and to get germination.

Symbiotic propagation occurs when the orchid and seed and fungi are put together in sterile conditions.



Once the seeds have germinated in the agar they are pricked out. 4-5 plants are placed in a bigger growth media in



a tub until they are big enough to pot on.

One of the leek orchids which have been propagated for a number of years. >

Working with landholders and translocation program



Many species have small numbers and are known in only a few sites and are vulnerable to both human activities and natural catastrophic events. Working with landholders is one of the key pursuits to the success of re-establishing of orchid populations and preserving those that have either been previously identified in an area or are currently growing there. They are able to give advice on when to mow or graze or burn an area; how to reduce the impact of wildlife browsing. They have found that cages are a must for seed collecting to be successful. It is also a visual guide for land managers.

Focus of the translocation program is in the Midlands - one of the reasons being that this has a large number of critically endangered grassland orchids such as *Paraprasophyllum taphanyx*. The group was given a grant to recover *P. taphanyx* in one year. The time-frame was not possible so they decided



P. taphanyx in one year. The time-frame was not possible so they decided instead to look for more of them as well as others that were on the endangered list and a priority of the orchid recovery plan. Some of these: *Paraprasophyllum olidum, P. incorrectum, P. tunbridgense, Caledenia anthracite, Pterostylis commutata* and *P. wapstrarum.*



Unsurprisingly they did not find more *P. taphanyx* but it was an encouraging year because they surveyed nineteen different sites on eight properties.

< A new population of twenty one *Prasophyllum incorrectum*, golfers leek orchid, was discovered. It was known previously in two places but with only one individual plant.

Yet another important find was *Pterostylis commutata*, midlands greenwood. They found 32 plants on private property about 8 km from the nearest known site. It is the biggest known site to date and they were able to successfully collect seed from them for the very first time.

It was also pleasing to find Increased numbers at a known site for *Paraprasophyllum tunbridgense*. It had not been surveyed since 2007.

While more extension surveys and tranlocation site assessments will be done the group intends to start the translocation program with

P. incorrectum, the golfers leek orchid, because it has been successfully grown and there are quite a few plants in the nursery. In addition potential translocation sites have been identified for *Paraprasophyllum taphanyx*, *P. olidum*, *P. incorrectum*, *Pterostylis commutata* and *Caladenia anthracina*.

Thus the next step involves pollinator baiting - to take flowering plants to the site to check that pollinators are present, to confirm that the orchid is capable of natural pollination in that area. Finally the propagation of plants for translocation. The group needs to raise funds to do this.

Community Engagement

People seek the best photos of an orchid but the evidence is clear that when we are in pursuit of that special photo we also threaten its existence.

Magali spoke of her unsuccessful efforts over several years to collect seed from *P. tunbridgense* (right). It wasn't until the area was cordoned off that she was able to collect the seed. Beforehand, the plants without flower but in seed were not seen by visitors, and so were trampled as they took photos of the few remaining flowers.

The Canadian study by Marilyn Light showed the harm being done just by standing next to an orchard for a brief time. It was discovered that there was fewer fungi present and this means fewer orchids.

The danger is that people taking photos leave an inhospitable ring for germination around the orchid which is so dependent on the fungi.

Consequently we all must ask ourselves: Do we need to take that photo? We can rethink our equipment and use longer range lenses rather than having to take the close-up shot. Consider taking up the opportunity offered each October at RTBG to photograph Tasmanian orchids.

Another aspect of people's behaviour is the tendency to 'garden' around a plant, to move a twig, old leaf etc. This alters the vegetation around the plant, at times exposes it to browsing animals.



Placing photos on social media can be quite destructive if a location is given because that location draws attention and more orchids are 'killed with kindness'.

Another negative response from online posting is that too many people bombard landholders with requests to visit to the extent that some landholders ban all people, including those working to conserve these plants.

There are biosecurity concerns when people flock to a site. Not only must footwear be cleaned but also equipment such as tripods.



Magali's words certainly had an impact. Our engagement needs rethinking. As we move through the bush and enjoy the natural environment, we must be alert to the damage we are inflicting, in particular on native orchids. Our scientific knowledge of human impact is so much greater but now that knowledge needs to be dispersed like seeds (as long as they are sterilised!) into all parts of the community. We can help by spreading the word about ethical photography. Magali believes that by talking, explaining what needs to be done and through peer pressure, we can change behaviour. For those who fear that little is being done we can make it known that some conservation is happening. For example: joining Threatened Plants Tasmania and helping to monitor the threatened orchids might be a better way to visit an endangered plant rather than going to photograph it.

To finish:- a list of the groups involved with the Orchid Conservation Program.

Funders:

Australian Orchid Foundation Australian Government Westlands Nursery Natural Area Consulting Kew – Millennium Seed

Partners: Royal Tasmanian Botanical Gardens Tasmanian Seed Conservation Centre

Collaborators:

Threatened Species Section NRE Threatened Plants Tasmania Parks and Wildlife Service EcoTas Forico Bush Heritage Tasmanian Land Conservancy It is also worth looking at an NRM South YouTube video which shows a little of the work of the Orchard

Conservation Program and the set up at the RTBG.



It was a comprehensive, most informative presentation - one that as individuals we can respond to with better practices when we enjoy our bushland walks but also one that we can respond to by supporting and spreading knowledge of the crucial work being carried out under the Orchid Conservation Program. We could also donate to the Orchid Conservation Program by visiting the Landscape Recovery Foundation website.

The meeting ended with lots to discuss over a well stocked supper thanks to Gilly and Margaret.

Friday, 24 March

Excursion to Briseis Water Race, Branxholm

Following cancellations four members managed the excursion alongside this historic water race through wet rainforest which never loses its ability to delight.

It was as Roy S. predicted a short, flat walk with lots to see.



On first glimpse it is the majestic ferns that catch the eye but there were trees - especially *Pomaderris apetala*, *Pittosporum bicolor, Eucalyptus viminalis, E. obliqua, Acacia leprosa,* varnished wattle, and A.verticillata, prickly moses.



A sprawling, in places, straggling understorey was composed of shrubs such as *Monotoca elliptica, Trochocarpa thymifolia, Coprosma* sp. plus *Lomandra* and *Dianella tasmanica*. Vivid, lush and much varied green hues provided the day's colour scheme, but *D. tasmanica*'s rich blue/purple berries certainly interjected with a little help from the scarlet *Pittosporum bicolour* berries. Note close-up of fruit showing about 20 sticky seeds in neat rows in the seed capsule.



Tmisipteris obliqua, common fork fern

Blechnum wattsii, hard water-fern

We learned to note fern leaves' pinnation pattern - one factor in distinguishing between species. Some ferns seen: *Gleichenia macrophylla, Blechnum minus, B. wattsii, Polystichum proliferum and Microsorum pustulatum. Dicksonia antarctica* was prominent and pleasingly there was *Cyathea australis* standing even taller beside the track.

Of special note were:

Notogrammitis billardierei, finger fern

Histiopteris incisa, bat's wing fern, which is a moderately large ground fern, made distinctive by glaucous leaves that are soft and slightly fleshy. (See photo further down)

Todea barbara, austral king-fern, from an old family, Osmundaceae. In Tasmania it has only one genus with one species



...so it drew 'media attention' on discovery.



< It has a short, thick fibrous trunk, growing numerous crowns, each with its own fronds on the one plant as it ages.



Pomaderris apetala wearing mossy boots or at left, a moss collar with sporophytes. Amazingly a *Pterostylis sp.* now very dead can be seen also growing in the mossy collar.

Below left: Acacia leprosa, varnished wattle, phyllodes

Below right: Monotoca elliptica, tree broom heath















New *Pomaderris apetela* emerging ^ from the mossy base of the dogwood.

< Histiopteris incisa far left, with Blechnum minus, soft water-fern, right.



To recap: it was a flora filled walk beside an interesting historical feature: the water race which supported the Derby tin mine and was built by 300 men in 15 months between Jan. 1901 to March 1902.

The sounds of birds, running water and the myriad of patterns to be found in the natural environment just added to the pleasures of 'a day out in the bush'.



Tuesday 28 March

Tasmanian Native Garden Working Bee

The day was drizzly wet so just three members persisted with weeding this month but a few others intend to do some catch up weeding early in April.

Iant that Pleases

This noticeable *Alyogne huegelii* is always on show - its impressive flowers providing colour no matter what time of the year.



Although it has scrambled over neighbouring plants and almost claimed a garden bed to itself, it is forgiven because of its rewards - magnificent open lilac flowers.

A close-up shows that beauty is more than 'skin deep'. The undivided style tip is its means of identification from a hibiscus. Alyogyne huegelii, 'Delightfully Double', has been a mass display this season. This ever flowering shrub is the first native hibiscus with a double flower (ie the flower has an extra row of petals). Being a fast growing medium sized shrub makes it a superb feature plant in either a garden bed or large pot.



Alyogynes are profuse bloomers. They strike easily to fill spaces in the garden and with a good haircut will look stunning for years. Also at this time of the year they add a bit of colour in a vase when there is not so much in flower in our gardens.



One event to note in diaries:

April 23rd SUNDAY Autumn Plant Sale 9.45 - 1.00 at Max Fry Hall, Trevallyn

KPallett Editor